Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented) A method for operating an internal combustion engine with electrically actuated valves, the method comprising:

operating at least a cylinder in a multi-stroke mode; and

adjusting at least a number of valves that operate in a cycle of said cylinder based at least on an operating condition of at least an electrically actuated valve, where at least one valve operates to open and close in said cycle so that said cylinder operates with said adjusted number of valves.

2 (previously presented) The method of Claim 1 wherein said operating condition is a temperature of a valve actuator coupled to at least one of said electrically actuated valves.

3. (original) The method of Claim 2 wherein said valve actuator is comprised of at least an armature, a coil, and a core.

4. (previously presented) The method of Claim 1 wherein said operating condition of said electrically actuated valve is an impedance of a valve actuator coupled to at least one of said electrically actuated valves.

5. (previously presented) The method of Claim 1 wherein said operating condition of said electrically actuated valve is a temperature of at least one of said electrically actuated valves.

6 (previously presented) The method of Claim 1 wherein said operating condition of said electrically actuated valve is an amount of power consumed by a valve actuator coupled to at least one of said electrically valves.

7 (previously presented) A method for operating an internal combustion engine with valves that may be deactivated, the method comprising:

operating at least a cylinder in a multi-stroke mode; and

varying at least a number of valves that operate in a cycle of said cylinder as an operating condition of said engine varies, where at least one valve operates to open and close in said cycle of said cylinder so that said cylinder operates with said adjusted number of valves.

8-9. (cancelled)

10. (original) The method of Claim 7 wherein said operating condition is a cylinder valve temperature.

11. (previously presented) A method for determining a number of electrically actuated valves to operate in an internal combustion engine operating in a multi-stroke cylinder mode, the method comprising:

determining an operating condition of an electrically actuated valve;

operating at least one cylinder of said engine in a multi-stroke mode; and

determining a number of electrically actuated valves to operate, based on said operating condition, in said at least one cylinder operating in said multi-stroke mode, where at least one valve is operated in said at least one cylinder so that said cylinder operates with said determined number of electrically actuated valves.

12. (previously presented) The method of Claim 11 wherein said operating condition is a temperature of a valve actuator coupled to at least one of said electrically actuated valves.

13. (original) The method of Claim 12 wherein said valve actuator is comprised of at least an armature, a coil, and a core.

14. (previously presented) The method of Claim 11 wherein said operating condition of said electrically actuated valve is an impedance of a valve actuator coupled to at least one of said electrically actuated valves.

15. (previously presented) The method of Claim 11 wherein said operating condition of said electrically actuated valve is a temperature of at least one of said electrically actuated valves.

16. (previously presented) A method for determining a number of electrically actuated valves to operate in an internal combustion engine operating in a multi-stroke cylinder mode, the method comprising:

determining an operating condition of said engine;

operating at least one cylinder of said engine in a multi-stroke mode; and

determining a number of electrically actuated valves to operate, based on said operating condition, in said at least one cylinder operating in said multi-stroke mode, where at least one valve is operated in said at least one cylinder so that said cylinder operates with said determined number of electrically actuated valves.

17-19. (cancelled)

20. (previously presented) A method for determining a number of valves to operate in an internal combustion engine operating in a multi-stroke cylinder mode, the method comprising:

determining an operating condition of at least an electrically actuated valve;

operating at least two groups of cylinders, a first group operating in a first cylinder stroke mode, and a second group operating in a second cylinder stroke mode; and

determining a number of valves to operate, based on said operating condition, in said first cylinder group and in said second cylinder group, where at least one valve is operated in each cylinder of said first cylinder group and said second cylinder group so that each cylinder group operates with said determined number of valves.

21. (previously presented) The method of Claim 20 wherein said operating condition is a temperature of a valve actuator coupled to at least one of said electrically actuated valves.

22. (original) The method of Claim 21 wherein said valve actuator is comprised of at least an armature, a coil, and a core.

23. (previously presented) The method of Claim 20 wherein said operating condition of said electrically actuated valve is an impedance of a valve actuator coupled to at least one of said electrically actuated valves.

24. (previously presented) The method of Claim 20 wherein said operating condition of said electrically actuated valve is a temperature of at least one of said electrically actuated valves.

25. (previously presented) The method of Claim 20 wherein said operating condition of said electrically actuated valve is an amount of power consumed by a valve actuator coupled to at least one of said electrically actuated valves.

26. (previously presented) A method for determining a number of valves to operate in an internal combustion engine operating in a multi-stroke cylinder mode, the method comprising:

determining an operating condition of an engine;

operating at least two groups of cylinders, a first group operating in a first cylinder stroke mode, and a second group operating in a second cylinder stroke mode; and

determining a number of valves to operate, based on said operating condition, in said first cylinder group and in said second cylinder group, where at least one valve is operated in each cylinder of said first cylinder group and said second cylinder group so that each cylinder operates with said determined number of valves.

27-29. (cancelled)

30. (currently amended) A method for operating an internal combustion engine with electrically actuated valves, the method comprising:

operating at least a cylinder of said internal combustion engine; and

adjusting at least a number of operating electrically actuated valves and a number of strokes in a cycle of said cylinder based at least on an operating condition of said engine, where at least one valve is opened and closed in said cylinder so that said cylinder operates with said adjusted number of valves and strokes.

31-33. (cancelled)

34. (previously presented) The method of Claim 30 wherein said number of operating electrically actuated valves and said number of cylinder strokes is further based on an operating condition of at least an electrically actuated valve.

35. (previously presented) A method for determining at least a multi-stroke cylinder mode and the number of electrically actuated valves to operate in an internal combustion engine, the method comprising:

determining an operating condition of said internal combustion engine;

determining at least a multi-stroke cylinder mode based on said engine operating condition;

determining a number of electrically actuated valves to operate based on said engine operating condition; and

operating a cylinder with said determined number of valves and said determined number of strokes, where at least one valve is opened and closed in said cylinder.

35-38. (cancelled)

39. (previously presented) A computer readable storage medium having stored data representing instructions executable by a computer to control an internal combustion engine of a vehicle, said storage medium comprising:

instructions for operating at least a cylinder in a multi-stroke mode; and

instructions for adjusting at least a number of operating valves in said cylinder based at least on an operating condition of at least an electrically actuated valve, where at least one valve is opened and closed in said cylinder so that said cylinder operates with said adjusted number of valves.